

SAFETY AND BUILDINGS DIVISION
Plumbing Product Review
P.O. Box 2658
Madison, Wisconsin 53701-2658
TTY: Contact Through Relay

Jim Doyle, Governor Richard J. Leinenkugel, Secretary

December 3, 2008

RAINSOFT
AQUION WATER TREATMENT PRODUCTS
YE LIU
2080 E. LUNT
ELK GROVE VILLAGE IL 60007

Re: Description: WATER TREATMENT DEVICE- SOFTENER

Manufacturer: RAINSOFT

Product Name: RAINSOFT TC SERIES (POE)

Model Number(s): TC 50 D, TC 50 CD, TC 50 D, TC 50CD, TC 60SS D, TC 60SS CD, TC 60SS D,

TC CAB60SS CD, TC CAB60 D, TC CAB60 CD, TC CAB60 D, TC 60 CD, TC 60S D, TC CAB60S CD, TC 60S D, TC 60S D, TC 60S CD, TC 75 D, TC 75 CD, TC 75 CD, TC 75 CD, TC 100 D, TC 100 CD, TC CAB100 D, TC CAB100 CD, TC 100 D, TC 100 CD, TC 100 CD, TC 100S D, TC 100S CD, TC 100S CD, TC 150 CD, TC 150 D, TC 150 CD, TC 250 D, TC 250 CD, TC 250 CD, TC 400 D,

TC 400 CD, TC 400 D AND TC 400 CD (POE)

Product File No: 20080526

The specifications and/or plans for this plumbing product have been reviewed and determined to be in compliance with chapters Comm 82 through 84, Wisconsin Administrative Code, and Chapters 145 and 160, Wisconsin Statutes.

The Department hereby issues an approval based on the Wisconsin Statutes and the Wisconsin Administrative Code. This approval is valid until the end of September 2009.

This approval supersedes the approval issued on May 25, 2006 under product file number 20060044.

This approval is contingent upon compliance with the following stipulation(s):

- ➤ This product has undergone sufficient testing to document the product's ability to reduce only those contaminants and/or substances as specified in this approval letter when the product is installed and maintained in strict accordance with the manufacturers published instructions.
- Where the Department of Natural Resources (DNR) has jurisdiction, a written approval may be required prior to installation of this product in a water supply system to reduce the concentration of a contaminant that exceeds the primary drinking water standards contained in ch. NR 809, Wis. Admin. Code, the enforcement standards contained in ch. NR 140, Wis. Admin. Code, or for a water supply system that is subject to a written advisory opinion by the DNR. For more information contact the DNR Section of Private Water Systems, P.O. Box 7921, Madison, WI 53707, telephone (608) 266-3415.
- ➤ If these approved devices are modified or additional assertions of function or performance are made, then this approval shall be considered null and void, unless the change is submitted to the department for review and the approval is reaffirmed.
- > These cation exchange water softeners shall be sized, installed, programmed and maintained such that wastewater volumes, total dissolved solids and chloride discharges are minimized.

SBD-10564-E (N.10/97) File Ref: 08052601.DOC

Aquion Water Treatment Products – Rainsoft December 3, 2008

Page 2 of 3

Product File No.: 20080526

- ➤ At the time of installation, these devices shall be provided with an effective means to warn the users when they are not performing their function. This shall be accomplished by one of the following:
  - 1. sounding and alarm or flashing a light, each connected to an acceptable power source;
  - 2. providing a sampling kit for analysis of hardness or other appropriate contaminants; or
  - 3. providing a hardness monitor.

Based on testing data submitted to and reviewed by the department, this approval recognizes that these plumbing products will reduce the concentration of contaminants as specified on pages 1 through 3 of this letter.

## WATER SOFTENING CAPABILITIES PRODUCT FILE NUMBER 20080526 TABLE 1 OF 1

Model Numbers	Capacity*						
Apollo Series	Rating 1		Rating 2		Rating 3		Flow Rate
Metered	Grains	Pounds	Grains	Pounds	Grains	Pounds	gpm @ psig
TC 50 D	7,300	2.0	14,400	5.0	18,900	7.5	10.0 @ 7.8
TC 50 CD	7,300	2.0	14,400	5.0	18,900	7.5	10.0 @ 7.8
TC 60SS D	6,300	2.0	11,500	6.0	13,200	9.0	11.6 @ 10.5
TC 60SS CD	6,300	2.0	11,500	6.0	13,200	9.0	11.6 @ 10.5
TC 60 D	7,100	2.4	14,100	6.0	18,500	9.0	10.0 @ 10.0
TC 60 CD	7,100	2.4	14,100	6.0	18,500	9.0	10.0 @ 10.0
TC 60S D	7,600	2.4	15,000	6.0	19,700	9.0	10.0 @ 9.4
TC 60S CD	7,600	2.4	15,000	6.0	19,700	9.0	10.0 @ 9.4
TC 75 D	10,900	3.0	21,600	7.5	28,300	11.2	9.3 @ 6.8
TC 75 CD	10,900	3.0	21,600	7.5	28,300	11.2	9.3 @ 6.8
TC 100 D	11,700	3.0	25,700	10.0	27,300	15.0	10.0 @ 9.4
TC 100 CD	11,700	3.0	25,700	10.0	27,300	15.0	10.0 @ 9.4
TC 100 D	10,900	3.0	24,000	10.0	25,400	15.0	10.0 @ 10.0
TC 100 CD	10,900	3.0	24,000	10.0	25,400	15.0	10.0 @ 10.0
TC 100S D	10,900	3.0	24,000	10.0	25,400	15.0	10.0 @ 10.0
TC 100S CD	10,900	3.0	24,000	10.0	25,400	15.0	10.0 @ 10.0
TC 150 D	17,500	4.5	38,600	15.0	40,900	22.5	10.2 @ 7.8
TC 150 CD	17,500	4.5	38,600	15.0	40,900	22.5	10.2 @ 7.8
TC 250 D	29,200	7.5	64,300	25.0	68,200	37.5	12.0 @ 9.9
TC 250 CD	29,200	7.5	64,300	25.0	68,200	37.5	12.0 @ 9.9
TC 400 D	46,700	12.0	102,900	40.0	109,100	60.0	11.8 @ 9.5
TC 400 CD	46,700	12.0	102,900	40.0	109,100	60.0	11.8 @ 9.5

<sup>\*</sup> The softener capacity rating is based on grains of hardness, due to calcium and magnesium cations, removed (as calcium carbonate) while producing soft water between successive regenerations and is related to the pounds of salt required for each regeneration. The tests run to generate the data for table 1 were conducted in accordance with NSF Standard 44.

Aquion Water Treatment Products – Rainsoft December 3, 2008 Page 3 of 3

Product File No.: 20080526

This device was tested under controlled laboratory, or field, conditions. The actual performance of this device for a specific end use installation will vary from the tested conditions based on local factors such as water pressure, water temperature and water chemistry.

The department is in no way endorsing this product or any advertising, and is not responsible for any situation which may result from its use.

Sincerely,

Glen W. Schlueter
Engineering Consultant-Plumbing Product Reviewer
Bureau of Integrated Services
Safety and Buildings Division
Department of Commerce
(608) 267-1401 Phone
(608) 267-9566 Fax
glen.schlueter@wi.gov Email
8:00AM – 4:30PM CST Work Hours

GWS:gws